

Appl. No. 09/466,405
Amdt. dated January 21, 2004
Reply to Office Action of October 22, 2003

Amendments to the Claims

Claims 1-9 (*Cancelled*)

C1
10. (*Currently Amended*) A processing system, comprising:

a device operable to decode a first program instruction into a first microcode instruction, said device further operable to decode a second program instruction into a second microcode instruction;

a circuit in electrical communication with said device, said circuit operable to process the first microcode instruction subsequent to a first decoding of the first program instruction by said device, said circuit further operable to process the second microcode instruction subsequent to a second decoding of the second program instruction by said device and a first processing of the first microcode instruction by said circuit;

wherein the first program instruction includes a first field defining a first jump type to be decoded by said device;

wherein the first program instruction further includes a second field defining a first destination address to be decoded by said device;

wherein the second program instruction includes a third field defining a second jump type to be decoded by said device; and

~~wherein the second program instruction excludes a fourth field defining a second destination address to be decoded by said device~~ wherein a fourth field defines a second destination address to be decoded by said device, and the second program instruction excludes the fourth field.

11. (*Previously Presented*) The processing system of claim 10,

wherein said device is further operable to store the first destination address as a default-destination-address as a result of the first decoding of the first program instruction by said device; and

wherein said device is further operable to include the first destination address in the second microcode instruction as a result of the second decoding of the second program instruction by said device.

Appl. No. 09/466,405
Amdt. dated January 21, 2204
Reply to Office Action of October 22, 2003

C1
12. (*Currently Amended*) The processing system of claim 10,
wherein the first program instruction includes a fifth field defining a first jump
condition to be decoded by said device;

~~wherein the second program instruction excludes a sixth field defining a second
jump condition to be decoded by said device. wherein a sixth field defines a second jump
condition to be decoded by said device, and the second program instruction excludes the
sixth field.~~

13. (*Previously Presented*) The processing system of claim 12,
wherein said device is further operable to store the first jump condition as a
default-condition as a result of the first decoding of the first program instruction by said
device; and

wherein said device is further operable to include the first jump condition in the
second microcode instruction as a result of the second decoding of the second program
instruction by said device.

14. (*Currently Amended*) The processing system of claim 10,
wherein said device is further operable to decode a third program instruction into
a third microcode instruction;

wherein said circuit is further operable to process the third microcode instruction
subsequent to the first processing of the first microcode instruction by said circuit, prior
to the second decoding of the second program instruction by said device and subsequent
to a third decoding of the third program instruction by said device;

wherein the third program instruction includes a fifth field defining a first jump
condition to be decoded by said device;

~~wherein the second program instruction excludes a sixth field defining a second
jump condition to be decoded by said device. wherein a sixth field defines a second jump
condition to be decoded by said device, and the second program instruction excludes the
sixth field.~~

Appl. No. 09/466,405
Amdt. dated January 21, 2004
Reply to Office Action of October 22, 2003

- C/
15. *(Previously Presented)* The processing system of claim 14,
wherein said device is further operable to store the first jump condition as a default-condition as a result of the third decoding of the third program instruction by said device; and
wherein said device is further operable to include the first jump condition in the second microcode instruction as a result of the second decoding of the second program instruction by said device.
16. *(Previously Presented)* The processing system of claim 10,
wherein the first jump type is one of a branch instruction or a call instruction.
17. *(Previously Presented)* The processing system of claim 10,
wherein the second jump type is one of a branch instruction or a call instruction.
18. *(Currently Amended)* A processing system, comprising:
a device operable to decode a first program instruction into a first microcode instruction, said device further operable to decode a second program instruction into a second microcode instruction;
a circuit in electrical communication with said device, said circuit operable to process the first microcode instruction subsequent to a first decoding of the first program instruction by said device, said circuit further operable to process the second microcode instruction subsequent to a second decoding of the second program instruction by said device and a first processing of the first microcode instruction by said circuit;
wherein the first program instruction includes a first field defining a first jump type to be decoded by said device;
wherein the first program instruction further includes a second field defining a first jump condition to be decoded by said device;
wherein the second program instruction includes a third field defining a second jump type to be decoded by said device; and
~~wherein the second program instruction excludes a fourth field defining a second jump condition to be decoded by said device.~~ wherein a fourth field defines a second

Appl. No. 09/466,405
Amdt. dated January 21, 2204
Reply to Office Action of October 22, 2003

jump condition to be decoded by said device, and the second program instruction excludes the fourth field.

c1
19. *(Previously Presented)* The processing system of claim 18,
wherein said device is further operable to store the first jump condition as a default-condition as a result of the first decoding of the first program instruction by said device; and

wherein said device is further operable to include the first jump condition in the second microcode instruction as a result of the second decoding of the second program instruction by said device.

20. *(Previously Presented)* The processing system of claim 18,
wherein the first jump type is one of a branch instruction or a call instruction.

21. *(Previously Presented)* The processing system of claim 18,
wherein the second jump type is one of a branch instruction or a call instruction.

22. *(Currently Amended)* A processing system, comprising:
a device operable to decode a first program instruction into a first microcode instruction, said device further operable to decode a second program instruction into a second microcode instruction;

a circuit in electrical communication with said device, said circuit operable to process the first microcode instruction subsequent to a first decoding of the first program instruction by said device, said circuit further operable to process the second microcode instruction subsequent to a second decoding of the second program instruction by said device and a first processing of the first microcode instruction by said circuit;

wherein the first program instruction further includes a first field defining a first destination address to be decoded by said device;

wherein the second program instruction includes a second field defining a jump type to be decoded by said device; and

Appl. No. 09/466,405
Amdt. dated January 21, 2204
Reply to Office Action of October 22, 2003

C1
~~wherein the second program instruction excludes a third field defining a second destination address to be decoded by said device.~~ wherein a third field defines a second destination address to be decoded by said device, and the second program instruction excludes the third field.

23. *(Previously Presented)* The processing system of claim 22,

wherein said device is further operable to store the first destination address as a default-destination-address as a result of the first decoding of the first program instruction by said device; and

wherein said device is further operable to include the first destination address in the second microcode instruction as a result of the second decoding of the second program instruction by said device.

24. *(Previously Presented)* The processing system of claim 23,

wherein the second program instruction excludes a fourth field defining a jump condition to be decoded by said device; and

wherein said device is further operable to include the jump condition in the second microcode instruction as a result of the second decoding of the second program instruction by said device

25. *(Previously Presented)* The processing system of claim 22,

wherein the jump type is one of a branch instruction or a call instruction.

26. *(Currently Amended)* A processing system, comprising:

a device operable to decode a first program instruction into a first microcode instruction, said device further operable to decode a second program instruction into a second microcode instruction;

a circuit in electrical communication with said device, said circuit operable to process the first microcode instruction subsequent to a first decoding of the first program instruction by said device, said circuit further operable to process the second microcode

Appl. No. 09/466,405
Amdt. dated January 21, 2204
Reply to Office Action of October 22, 2003

instruction subsequent to a second decoding of the second program instruction by said device and a first processing of the first microcode instruction by said circuit;

cl wherein the first program instruction further includes a first field defining a first jump condition to be decoded by said device;

wherein the second program instruction includes a second field defining a jump type to be decoded by said device; and

~~wherein the second program instruction excludes a third field defining a second jump condition to be decoded by said device.~~ wherein a third field defines a second jump condition to be decoded by said device, and the second program instruction excludes the third field.

27. *(Previously Presented)* The processing system of claim 26,

wherein said device is further operable to store the first jump condition as a default-condition as a result of the first decoding of the first program instruction by said device; and

wherein said device is further operable to include the first jump condition in the second microcode instruction as a result of the second decoding of the second program instruction by said device.

28. *(Previously Presented)* The processing system of claim 27,

wherein the second program instruction excludes a fourth field defining a destination address to be decoded by said device; and

wherein said device is further operable to include the destination address in the second microcode instruction as a result of the second decoding of the second program instruction by said device.

29. *(Previously Presented)* The processing system of claim 26,

wherein the jump type is one of a branch instruction or a call instruction.